Air Quality
TIER II OPERATING PERMIT

State of Idaho
Department of Environmental Quality

PERMIT No: T2-050021
FACILITY ID No.: 027-00010
AQCR: 064 **CLASS:** A
SIC: 2063 **ZONE:** 11
UTM COORDINATE (km): 534.5, 4828.0

1. **PERMITTEE**
The Amalgamated Sugar Company LLC

2. **PROJECT**
Tier II Operating Permit Revision

3. **MAILING ADDRESS**	**CITY**	**STATE**	**ZIP**
P.O. Box 8787	Nampa	ID	83653-8787
4. **FACILITY CONTACT**	**TITLE**	**TELEPHONE**	
Kent Quinney	Nampa Plant Manager	(208) 466-3541	
5. **RESPONSIBLE OFFICIAL**	**TITLE**	**TELEPHONE**	
Kent Quinney	Nampa Plant Manager	(208) 466-3541	
6. **EXACT PLANT LOCATION**		**COUNTY**	
138 W. Karcher Road, Nampa, Idaho		Canyon	

7. **GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS**
Beet sugar manufacturing

8. **PERMIT AUTHORITY**

This permit is issued according to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.400, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit.

This permit has been granted on the basis of design information presented in the application and the Idaho Department of Environmental Quality's (DEQ) technical analysis of the supplied information. Changes in design or equipment that result in any change in the nature or amount of emissions may be considered a modification. Modifications are subject to DEQ review in accordance with IDAPA 58.01.01.200 of the *Rules for the Control of Air Pollution in Idaho.*

TONI HARDESTY, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED:	September 30, 2002
DATE MODIFIED/REVISED:	PROPOSED PUBLIC COMMENT
DATE EXPIRES:	September 30, 2007

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Acronyms, Units, and Chemical Nomenclature

AQCR	Air Quality Control Region
CO	carbon monoxide
CSB	concentrated separator byproducts
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
gr/dscf	grains per dry standard cubic foot
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
Km	Kilometer
lb/hr	pound per hour
MMscf/hr	million standard cubic feet per year
NAAQS	National Ambient Air Quality Standards
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operations and maintenance
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PTC	permit to construct
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	sulfur dioxide
TASCO	The Amalgamated Sugar Co. LLC
TDS	total dissolved solids
TEOM	Tapered Element Oscillating Microbalance Ambient Air Monitor
T/hr, T/yr	tons per hour, and tons per year, respectively
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. TIER II OPERATING PERMIT SCOPE

Purpose

1.1 This permit is a revision to the facility existing Tier II operating permit. The permit revision removes the operating and monitoring requirements for the PM_{10} high volume sampler, and incorporates the correct process weight limitation for equipment used to dehydrate sugar beet pulp. Emissions do not increase as a result of the permit revision.

1.2 This revised Tier II operating permit incorporates and replaces Tier II Operating Permit No. 027-00010 issued September 30, 2002, the terms and conditions of which shall no longer apply.

Regulated Sources

1.3 Table 1.1 below lists sources of emissions that are specifically regulated in this Tier II operating permit.

Table 1.1: SUMMARY OF REGULATED SOURCES

Permit Sections	Source Description	Emissions Control(s)
2	Fugitive Dust Sources	Fugitive Dust Plan
3	Three coal/natural gas-fired boilers (S-B1, S-B2, S-B3)	Baghouse A-B1/2 and A-B3
4	One natural gas-fired boiler (S-B4)	None
5	Three pulp dryers (S-D1, S-D2, S-D3)	Cyclones A-D1A, A-D2A, A-D3A; Scrubbers A-D1B, A-D2B, A-D3A
6	Five pellet mills (S-D4, S-D5, S-D6, S-D7, S-D8)	Cyclones A-D4, A-D5, A-D6, A-D7, A-D8; Baghouse
7	Two lime kilns (S-K1, S-K2)	60%: Gas washers A-K1A, A-K2A; Carbonation systems A-K1B, A-K2B
		40%: Baghouse A-K1/2
8	Two process slakers (S-K4)	Scrubber A-K4
9	One drying granulator (S-W1)	Scrubber A-W1
10	Two cooling granulators (S-W2, S-W3)	Scrubbers A-W2, A-W3
11	Three sugar handling systems (S-W4, S-W6, S-W7)	Baghouses A-W4, A-W6, A-W7
12	Lime kiln building (S-K3)	Lime kiln building: Baghouse A-K3

2. FACILITY-WIDE CONDITIONS

Table 2.1 below contains a summary of requirements that apply generally to emissions units at the facility.

Table 2.1: SUMMARY OF FACILITY-WIDE REQUIREMENTS

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Recordkeeping Requirements
2.1, 2.2	Fugitive dust	Reasonable control of fugitive dust / Fugitive Dust Management Plan	IDAPA 58.01.01.650-651	2.2, 2.3, 2.4
2.5	PM_{10} and SO_2	Ambient monitoring requirements / No cause or significant contribution to a NAAQS violation	IDAPA 58.01.01.403.02	2.5.1 - 2.5.5
2.6-2.7	Criteria air pollutants	Performance testing requirements	IDAPA 58.01.01.405.02	2.6 – 2.14

Fugitive Dust Requirements

2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, water, or suitable chemicals to, or covering of dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, where practical, of hoods, fans and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
- Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.
- Prompt removal of earth or other stored material from streets, where practical.

2.2 By November 29, 2002, the permittee shall implement the following Fugitive Dust Management Plan to control fugitive emissions. The permittee shall monitor and maintain weekly records of any and all actions taken to comply with the measures, including, but not limited to, frequency of application or observation, type and quantity of suppressant applied, the extent and date(s) of any deviation from any provision of Facility-wide Condition 2.2, and corrective actions implemented to correct any deviation(s).

- Operate atomizing sprays at the coal unloading station (Emissions Unit No. F-04) during any material-moving activities at the unloading station.
- Install and operate fugitive dust spray bar systems on all rolling stock, with the exception of the coal rolling packer and temporary rental equipment, associated with operations in the vicinity of the coal storage area.
- Inspect and maintain the berm and trees at the eastern boundary of the facility as necessary, but not less than annually.
- Apply water or a water/CSB dust suppressant to all facility roads, coal and coke haul roads, and beet unloading areas as necessary, but not less than weekly from May 1 through October 31 of each year.
- Apply water to the coal pile, at least biweekly during unloading and transfer activities.
- Apply a surfactant to the coal pile, at least once per year after the coal storage area has reached final grade.

2.3 The permittee shall monitor and record all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

2.4 The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

Ambient Monitoring Requirements

2.5 By September 30, 2003, the permittee shall install, maintain, and operate one reference PM_{10} Tapered Element Oscillating Microbalance (TEOM), and one reference SO_2 and meteorological monitoring equipment at a location(s) approved by DEQ. The permittee shall also maintain the reference high volume PM_{10} sampler required by Tier II Operating Permit No. 027-00010, issued September 30, 2002, and shall operate the sampler as directed by DEQ. Ambient air quality monitoring shall be performed to collect data on meteorological parameters and ambient concentrations of PM_{10} and SO_2, as follows:

2.5.1 The permittee shall submit an ambient monitoring protocol to DEQ for approval by January 28, 2003. The protocol shall provide the specifications on the monitoring equipment and define the operating parameters for conducting the monitoring. The protocol when approved shall become part of the terms and conditions of the Tier II operating permit.

2.5.2 The ambient air monitoring site location(s) shall be selected through modeling analysis. The permittee shall submit a modeling analysis protocol to DEQ for approval by November 29, 2002. The permittee shall conduct and submit the modeling analysis for placing the monitors, with all backup data requested by DEQ, for approval within 60 days after the modeling protocol is approved.

2.5.3 The permittee shall make the PM_{10} TEOM and SO_2 monitoring station(s) data accessible to DEQ on a real-time basis via telemetry. All monitoring data shall also be submitted to DEQ in accordance with the ambient monitoring protocol approved by DEQ. The data shall be subject to DEQ quality assurance review. DEQ may make all valid ambient air quality data available to the public.

2.5.4 The permittee may discontinue maintenance and operation of the SO_2 ambient air quality monitor at any time after all of the requirements of Permit Condition 13.4 have been satisfied.

2.5.5 The permittee may discontinue maintenance and operation of the PM_{10} ambient air quality monitors at any time after all of the requirements of Permit Condition 13.8 have been satisfied.

Performance Testing Requirements

2.6 For all required performance testing, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent decree, or by DEQ approval. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests such testing not be performed on weekends or state holidays.

All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, prior to conducting any compliance test, the permittee is strongly encouraged to submit in writing to DEQ, at least 30 days in advance, the following for approval:

- The type of method to be used
- Any extenuating or unusual circumstances regarding the proposed test
- The proposed schedule for conducting and reporting the test

Within 30 days following the date on which a compliance test required by this permit is concluded, the permittee shall submit to DEQ a compliance test report for the respective test. The compliance test report shall include a description of the process, identification of the method used, equipment used, all process operating data collected during the test period, and test results as well as raw test data and associated documentation, including any approved test protocol.

The proposed test date(s), test date rescheduling notice(s), compliance test report, and all other correspondence shall be sent to the following:

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 N. Orchard
Boise, ID 83706-2239
Telephone: (208) 373-0550 Fax: (208) 373-0287

2.7 For all required performance testing, the permittee shall use the test methods listed in Table 2.2 to measure the pollutant emissions.

Table 2.2: APPROVED TEST METHODS

Pollutant	Test Method[a]	Special Conditions
PM_{10}	EPA Method 201.a and Method 202	
PM	EPA Method 5	
NO_X	EPA Method 7	
SO_2	EPA Method 6	
CO	EPA Method 10	
VOC	EPA Method 25	
Opacity	EPA Method 9	For an NSPS source, use IDAPA 58.01.01.625.and Method 9. For other sources, use IDAPA 58.01.01.625 only.

[a]Or DEQ-approved alternative in accordance with IDAPA 58.01.01.157

2.8 For all required performance testing, the permittee shall address the required averaging period specified in accordance with IDAPA 58.01.01.679 and the altitude correction in IDAPA 58.01.01.680 prior to conducting the test.

2.9 For all required performance testing, a visible emissions evaluation shall be performed during each test. The visible emissions evaluation shall be conducted in accordance with the procedures contained in IDAPA 58.01.01.625.

Performance Testing Schedule

2.10 By January 28, 2003 and before the end of the 2002/2003 beet campaign, the permittee shall conduct performance tests as required in Facility-wide Condition 2.10.1.

2.10.1 Performance tests shall be conducted on the South, Center and North dryers to demonstrate compliance with the emissions limits for PM_{10} in Permit Condition 13.2. The dryer shall be tested with coal as the exclusive fuel. The permittee shall monitor and record the throughput of the dryer, coal feed rate in tons per hour, and scrubber differential pressure of the scrubbers during each test. Throughput of the dryer shall be represented by the sum of the masses of coal, wet pulp, and CSB fed to the dryer. The permittee shall collect a representative sample of recirculated water from the scrubber during each test. The concentration of TDS in the sample water shall be analyzed, recorded, and expressed in milligrams of solids per liter of water.

2.10.2 If the PM_{10} emissions rate measured in the performance test conducted in accordance with Facility-wide Condition 2.10.1 is less than or equal to 75% of the PM_{10} emissions standard in Facility-wide Condition 13.2, no further testing shall be required. If the PM_{10} emissions rate measured during the performance test conducted in accordance with Facility-wide Condition 2.10.1 is greater than 75%, but less than or equal to 90% of the PM_{10} emissions standard in Facility-wide Condition 13.2, a second test shall be required in the third year of the permit term. If the PM_{10} emissions rate measured during the performance test conducted in accordance with Facility-wide Condition 2.10.1 is greater than 90% of the PM_{10} emissions standard in Facility-wide Condition 13.2, the permittee shall conduct a compliance test annually.

2.11 The permittee shall conduct performance tests as required in Facility-wide Conditions 2.11.1 through 2.11.5 during the first beet campaign following fulfillment of the provisions of Permit Condition 13.4.

2.11.1 Performance tests shall be conducted on the B&W No. 1 boiler, the B&W No. 2 boiler, and the Riley boiler to demonstrate compliance with the emissions limits for PM_{10} and CO in Permit Condition 3.3. The performance test shall be conducted after the requirements of Permit Condition 13.4.2 have been satisfied. For the PM_{10} performance test, the boilers shall be tested with coal as the exclusive fuel. For the CO performance test, the boilers shall be tested with natural gas as the exclusive fuel. The permittee shall monitor and record the steam production rate of each boiler; coal feed rate to each boiler in tons per hour or natural gas firing rate in MMscf/hr; the highest heating value and analysis results, including ash content, for the performance test with coal; and pressure drop across each baghouse during each test.

2.11.2 Performance tests shall be conducted on the B&W No. 1, B&W No. 2, and Riley boilers to demonstrate compliance with the emissions limit for PM in Permit Condition 3.4. The performance test shall be conducted after the requirements of Permit Condition 13.4.2 have been satisfied. The tests shall be conducted with coal as the exclusive fuel in the boilers. The permittee shall monitor and record the steam production rate of each boiler; coal feed rate to each boiler in tons per hour; the highest heating value and analysis results, including ash content, for the coal; and pressure drop across the baghouse during each test.

2.11.3 Performance tests shall be conducted on the pellet mills to demonstrate compliance with the emissions limits for PM_{10} in Permit Condition 6.3. The performance test shall be conducted after the requirements of Permit Condition 6.6 have been satisfied. The permittee shall monitor and record total throughput of the mills and the pressure drop across the baghouse during each test. Total throughput of the mills will be determined by the dry shred weight-o-meter.

2.11.4 Performance tests shall be conducted on the lime kilns to demonstrate compliance with the emissions limits for PM_{10} and CO in Permit Condition 7.3. The permittee shall monitor and record the lime rock throughput of each kiln and the pressure drop across the baghouse during each test.

2.11.5 If an emissions rate measured in the initial performance test conducted pursuant to Permit Condition 2.11.1 is less than or equal to 75% of an applicable emissions standard in Permit Condition 3.3, no further testing shall be required. If an emissions rate measured during the performance test conducted pursuant to Permit Condition 2.11.1 is greater than 75%, but less than or equal to 90% of an applicable emissions standard in Permit Condition 3.3, a second test shall be required in the third year of the permit term. If an emissions rate measured during the performance test conducted pursuant to Permit Condition 2.11.1 is greater than 90% of an applicable emissions standard in Permit Conditions 3.3, the permittee shall conduct a performance test annually.

2.12 The permittee shall conduct performance tests as required in Facility-wide Conditions 2.12.1 through 2.12.3 during the second beet campaign following fulfillment of the provisions of Permit Condition 13.4.

2.12.1 Performance tests shall be conducted on the Union boiler to demonstrate compliance with the emissions limits for PM_{10} and CO in Permit Condition 4.3. The permittee shall monitor and record the steam production rate of the boiler and the natural gas-firing rate of the boiler during each test.

2.12.2 Performance tests shall be conducted on the process slakers to demonstrate compliance with the emissions limits for PM_{10} in Permit Condition 8.3 and the emissions limit for PM in Permit Condition 8.4. The permittee shall monitor and record the calcium oxide rock throughput of each process slaker and the scrubber nozzle header pressure during each test.

2.12.3 Performance tests shall be conducted on the drying granulator to demonstrate compliance with the emissions limits for PM_{10} in Permit Condition 9.3 and the emissions limits for PM in Permit Condition 9.4. The permittee shall monitor and record the throughput of the drying granulator and the brix of the scrubber fluid during each test.

2.13 The permittee shall conduct performance tests as required in Facility-wide Conditions 2.13.1 through 2.13.3 during the third beet campaign following fulfillment of the provisions of Permit Condition 13.4.

2.13.1 Performance tests shall be conducted on the No. 1 cooling granulator to demonstrate compliance with the emissions limits for PM_{10} in Permit Condition 10.3. The permittee shall monitor and record the throughput of the granulator and the pressure drop across the baghouse during each test.

2.13.2 Performance tests shall be conducted on the process No. 2, specialties, and packaging-line sugar handling systems to demonstrate compliance with the emissions limits for PM_{10} in Permit Condition 11.3 and the applicable emissions limit for PM in Permit Conditions 11.4 or 11.5. The permittee shall monitor and record the throughput of the sugar handling system and the pressure drop across the baghouse during each test.

2.13.3 Performance tests shall be conducted on the lime kiln building baghouse during the third year of the permit term to demonstrate compliance with the emissions limit for PM_{10} in Permit Condition 12.3. The permittee shall monitor and record the total throughput of lime rock to the kilns and the pressure drop across the lime kiln building baghouse during each test.

2.14 The permittee shall conduct performance tests as required in Facility-wide Conditions 2.14.1 through 2.14.2 during the first beet campaign following fulfillment of the provisions of Permit Condition 13.8.

2.14.1 Performance tests shall be conducted on the South dryer to demonstrate compliance with the emissions limits for PM_{10} and CO in Permit Condition 5.3. For the PM_{10} performance test, the dryer shall be tested with coal as the exclusive fuel. For the CO performance test, the dryer shall be tested with natural gas as the exclusive fuel. The performance test shall be conducted after the requirements of Permit Condition 13.8 have been satisfied. The permittee shall monitor and record the tons of wet pulp and CSB fed to the dryer, coal feed rate in tons per hour or natural gas-firing rate in MMscf/hr, and scrubber differential pressure of the scrubbers during each test. The permittee shall collect a representative sample of recirculated water from the scrubber during each test. The concentration of TDS in the sample water shall be analyzed, recorded, and expressed in milligrams of solids per liter of water.

2.14.2 Performance tests shall be conducted on the South dryer to demonstrate compliance with the emissions limit for PM in Permit Condition 5.4. The tests shall be conducted with coal as the exclusive fuel in the dryer. The performance test shall be conducted after the requirements of Permit Condition 13.8 have been satisfied. The permittee shall monitor and record the tons of wet pulp and CSB fed to the dryer, coal feed rate in tons per hour, and scrubber differential pressure of the scrubbers during each test. The permittee shall collect a representative sample of recirculated water from the scrubber during each test. The concentration of TDS in the sample water shall be analyzed, recorded, and expressed in milligrams of solids per liter of water.

Operations and Maintenance Manual Requirements

2.15 The permittee shall develop an O&M manual for the appropriate emissions control device(s) each of the following sources: (a) the B&W No. 1, B&W No. 2, and Riley boilers; (b) the South, Center, and North dryers; (c) the No. 1, 2, 3, 4, and 5 pellet mills; (d) the A and B lime kilns; (e) A and B process slakers; (f) the drying granulator; (g) the No. 1 and No. 2 cooling granulators; (h) the process No.2, specialties, and packaging-line sugar handling systems; and (i) the lime kiln building. The permittee shall develop each O&M manual by September 30, 2003.

2.15.1 After the initial O&M manual development, the permittee shall update the control device monitoring program in the O&M manuals after each DEQ-approved performance test.

2.15.2 The O&M manuals shall address the operation, maintenance, and repair of applicable control device(s) for each source to ensure good working order and operation as efficiently as practicable. The manuals shall include, at a minimum, a general description of the control device(s); normal operating conditions and procedures; startup, shutdown, and maintenance procedures; upset conditions and corrective procedures; methods of preventing malfunctions; appropriate corrective actions to be taken; provisions for monthly inspections during regular operations; and provisions for annual inspections during planned maintenance outages. The permittee shall keep records of maintenance activities in accordance with Facility-wide Condition 2.16.

2.15.3 The O&M manuals shall include a control device monitoring program that establishes control device operating parameters to be monitored, their acceptable operating ranges, corrective action levels, monitoring equipment and procedures, monitoring frequency, and frequency of recordkeeping. The monitoring parameters shall include, but are not limited to, any specific control device monitoring parameter(s) required under any permit condition in this permit, unless DEQ approves their removal from this permit condition. The control device monitoring program shall be developed by the permittee based on performance test results, vendor data, and other supporting documentation.

2.15.4 The O&M manuals shall be maintained onsite and shall be made available to DEQ representatives upon request.

2.15.5 Whenever an operating parameter is outside the operating range specified by the control device monitoring program in an O&M manual, the permittee shall take corrective action as expeditiously as practicable to bring the operating parameter back within the operating range. Deviations from the operating range may not by themselves be considered deviations from applicable emissions standards, unless DEQ determines that the frequency, duration, or magnitude of the deviations indicates that additional action is required.

Monitoring and Recordkeeping Requirements

2.16 The permittee shall maintain sufficient recordkeeping to assure compliance with all of the terms and conditions of this operating permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

Reporting and Certification Requirements

2.17 Any reporting required by this permit, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit shall be submitted to the following:

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 N. Orchard
Boise, ID 83706-2239
Telephone: (208) 373-0550 Fax: (208) 373-0287

Obligation to Comply

2.18 Receiving a Tier II operating permit shall not relieve any owner or operator of the responsibility to comply with all applicable local, state, and federal rules and regulations.

3. EMISSIONS UNIT – B&W NO. 1, B&W NO. 2, AND RILEY BOILERS (S-B1, S-B2, S-B3)

3.1 Process Description

The three boilers permitted in this section are fired by pulverized coal and/or natural gas, and are used to supply steam for processes at the facility. Table 3.1 contains a description of each boiler.

Table 3.1: BOILER DESCRIPTIONS

Boiler	Unit Number	Installation Date	Rated Steam Capacity (lb steam/hr)
B&W No. 1 boiler	S-B1	1942	105,000
B&W No. 2 boiler	S-B2	1942	105,000
Riley boiler	S-B3	1969	250,000

3.2 Control Description

Emissions from the B&W No.1 and 2 boilers are controlled by a single baghouse (Unit No. A-B1/2) manufactured by Western Precipitation/Joy Manufacturing Co. Emissions from the Riley boiler are controlled by a baghouse (Unit No. A-B3) manufactured by Envirotech Corp.

Emissions Limits

3.3 Emissions Limits

Total emissions of PM_{10} and CO from the B&W No. 1, B&W No. 2, and Riley boilers shall not exceed any corresponding emissions rate limits listed in the following table:

Table 3.2: EMISSIONS LIMITS FOR COAL/NATURAL GAS BOILERS

Source Description / Unit Number	PM_{10}		CO	
	lb/hr	T/yr	lb/hr	T/yr
B&W No. 1 boiler / S-B1	138.1	604.3	36.4	159.0
B&W No. 2 boiler / S-B2				
Riley boiler / S-B3				

3.4 Grain-loading Limit

The permittee shall not discharge PM to the atmosphere from the B&W No. 1, B&W No. 2, or Riley boiler in excess of the concentrations shown in Table 3.3. When two fuels are burned concurrently, the allowable emissions shall be determined by proportioning the gross heat input and emissions standard for each fuel. The effluent gas volume shall be corrected to the oxygen concentration shown.

Table 3.3: ALLOWABLE PARTICULATE EMISSIONS BASED ON FUEL TYPE

Fuel Type	Allowable Particulate Emissions (gr/dscf)	Percent Oxygen
Coal, or combination of coal and natural gas	$0.100(X^a) + 0.011(Y^b)$	8.0
Natural gas	0.015	3.0

[a] percent of total heat input derived from the combustion of coal
[b] percent of total heat input derived from the combustion of natural gas

[Permit No. 13-0400-0010, 3/19/81]

Operating Requirements

3.5 Throughput Limits

For each boiler, the maximum allowable coal feeding rate and natural gas-firing rate shall be limited to 120% of the average feed and firing rate attained during the most recent performance test conducted pursuant to Facility-wide Conditions 2.11.1 or 2.11.2, for which DEQ approval has been granted, which demonstrated compliance with applicable pollutant emissions limit(s), unless such a feed or firing rate would cause emissions to exceed any emissions limit(s) set forth in this permit.

3.6 Fuel Limits

The permittee shall not use or fire coal with a sulfur content greater than 1% by weight.

3.7 Baghouse Operating Requirements

The baghouses shall be operated and maintained at all times during boiler operation. The pressure drop across each of the baghouses shall be maintained within manufacturer or O&M manual specifications.

Monitoring and Recordkeeping Requirements

3.8 Boiler Monitoring Requirements

The permittee shall monitor and record the information listed in Permit Conditions 3.8.1-3.8.8 for each boiler. The records shall be maintained in accordance with Facility-wide Condition 2.16.

3.8.1 The average daily coal feed rate in tons per hour.

3.8.2 The coal feed rate for each consecutive 12-month period in tons per year.

3.8.3 The daily hours of operation with coal.

3.8.4 The heat input rate expressed in millions of British thermal units per hour by correlating the coal feed rate with the coal high-heating value.

3.8.5 The average daily natural gas-firing rate in millions of standard cubic feet per hour.

3.8.6 The natural gas-firing rate for each consecutive 12-month period in millions of standard cubic feet per year.

3.8.7 The daily hours of operation with natural gas.

3.8.8 The fuel type whenever the fuel type is changed. Fuel type in this section means natural gas only, coal only, or the combination of natural gas and coal.

3.9 Baghouse Monitoring Requirements

The permittee shall install, operate, calibrate, and maintain measuring device(s) to continuously monitor the pressure drop across each of the baghouses. The pressure drop shall be recorded once per week while the boilers are in operation. In the event the measuring device becomes inoperable, it shall be repaired or replaced as soon as practicable. The records shall be maintained in accordance with Facility-wide Condition 2.16.

4. EMISSIONS UNIT – UNION BOILER (S-B4)

4.1 Process Description

The Union boiler is fired exclusively by natural gas and is used to supply steam to processes at the facility. This boiler was installed in 1957 and has a steaming capacity of 60,000 lb/hr.

4.2 Control Description

Emissions from the Union boiler are uncontrolled.

Emissions Limits

4.3 Emissions Limits

Emissions of PM_{10} and CO from the Union boiler shall not exceed any corresponding emissions rate limits listed in Table 4.1.

Table 4.1: EMISSIONS LIMITS FOR UNION BOILER

Source Description / Unit Number	PM_{10}		CO	
	lb/hr	T/yr	lb/hr	T/yr
Union boiler / S-B4	1.6	6.8	6.0	26.3

4.4 Grain-loading Limit

The permittee shall not discharge PM to the atmosphere from the Union boiler in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume.

Operating Requirements

4.5 Throughput Limits

The maximum allowable natural gas-firing rate of the Union boiler shall be limited to 120% of the average firing rate attained during the most recent performance test conducted pursuant to Facility-wide Condition 2.12.1, for which DEQ approval has been granted, which demonstrated compliance with applicable pollutant emissions limit(s), unless such a firing rate would cause emissions to exceed any emissions limit(s) set forth in this permit.

4.6 Fuel Limit

The Union boiler shall by fired exclusively by natural gas.

Monitoring and Recordkeeping Requirements

4.7 Boiler Monitoring Requirements

The permittee shall install, operate, calibrate, and maintain measuring device(s) to continuously monitor the natural gas-firing rate of the boiler. The daily hours of operation shall be recorded and the average daily firing rate shall be recorded in millions of standard cubic feet per hour. The natural gas-firing rate for each consecutive 12-month period shall be recorded in millions of standard cubic feet per year. In the event the measuring device becomes inoperable, it shall be repaired or replaced as soon as practicable. The records shall be maintained in accordance with Facility-wide Condition 2.16.

5. EMISSIONS UNIT – PULP DRYERS (S-D1, S-D2, S-D3)

5.1 Process Description

The three direct-fired pulp dryers are used to dry pressed beet pulp and CSB for production of cattle feed. The dryers are pulverized coal-and natural gas-fired. Table 5.1 contains a description of each dryer.

Table 5.1: DRYER DESCRIPTIONS

Dryer	Unit Number	Installation Date	Input Design Capacity (T/hr)
South	S-D1	1968	65
Center	S-D2	1968	65
North	S-D3	1956	25

By September 30, 2007, the Center and North dryers will be replaced by a steam dryer system (refer to Permit Condition 13.8 of the Compliance Schedule in this permit).

5.2 Control Description

Each exhaust stream from the South and Central dryers is split into two streams. The exhaust streams from each dryer are then controlled by a cyclone and a spray-impingement-type scrubber in series. Emissions from the North dryer are controlled by a cyclone and a spray-impingement-type scrubber in series.

Table 5.2: DRYER CONTROL DESCRIPTIONS

Emissions Unit / Unit Number	Emissions Control Device and Unit Number
South pulp dryer / S-D1	One cyclone and one spray-impingement-type scrubber in series / east stack (A-D1A and A-D1B)
	One cyclone and one spray-impingement-type scrubber in series / west stack (A-D1A and A-D1B)
Center pulp dryer / S-D2	One cyclone and one spray-impingement-type scrubber in series / east stack (A-D2A and A-D2B)
	One cyclone and one spray-impingement-type scrubber in series / west stack (A-D2A and A-D2B)
North pulp dryer / S-D3	One cyclone and one spray-impingement-type scrubber in series (A-D3A and A-D3B)

Emissions Limits

5.3 Emissions Limits

Upon fulfillment of the requirements of Permit Condition 13.8, emissions of PM_{10} and CO from the South dryer shall not exceed any corresponding emissions rate limits listed in Table 5.3.

Table 5.3: EMISSIONS LIMITS FOR SOUTH DRYER

Source Description / Unit Number	PM_{10}		CO	
	lb/hr	T/yr	lb/hr	T/yr
South pulp dryer / S-D1	18.7	82.0	126.8	555.2

5.4 Process Weight Limitation

The permittee shall not emit PM to the atmosphere from any of the pulp dryers in excess of the amounts shown in the following equations, where E is the total rate of emissions from all emissions points from the source in pounds per hour and P is the process weight in pounds per hour.

- If PW is less than 60,000 lb/hr,

  $E = 0.02518(P)^{0.67}$

- If PW is equal to or greater than 60,000 lb/hr,

  $E = 23.84(P)^{0.11} - 40$

Operating Requirements

5.5 Throughput Limits

The maximum allowable throughput, coal feed rate, and natural gas-firing rate of the dryers shall be limited 120% to the average rate attained during the most recent performance test conducted pursuant to Facility-wide Conditions 2.10 or 2.14, for which DEQ approval has been granted, which demonstrated compliance with applicable pollutant emissions limit(s), unless such rates would cause emissions to exceed any emissions limit(s) set forth in this permit. Throughput of each dryer shall be represented by the sum of the masses of coal, if applicable, wet pulp, and CSB fed to the dryer, and shall in no case exceed 65 tons per hour for either the South or Center dryer, nor 25 tons per hour for the North dryer.

5.6 Fuel Limit

The permittee shall not use or fire coal with a sulfur content greater than 1% by weight.

5.7 Cyclone and Scrubber Operating Requirements

The cyclones and scrubbers shall be operated and maintained at all times during dryer operation. The scrubber differential pressure of the scrubbers shall be maintained within manufacturer or O&M manual specifications.

5.8 Scrubber Water Requirements

The concentration of TDS in the scrubber water shall be maintained within manufacturer or O&M manual specifications.

Monitoring and Recordkeeping Requirements

5.9 Dryer Monitoring Requirements

The permittee shall monitor and record the information in Permit Conditions 5.9.1-5.9.9 for each dryer. The records shall be maintained in accordance with Facility-wide Condition 2.16.

5.9.1 The average daily coal feed rate in tons per hour.

5.9.2 The coal feed rate for each consecutive 12-month period in tons per year.

5.9.3 The daily hours of operation with coal.

5.9.4 The average daily natural gas-firing rate in millions of standard cubic feet per hour.

5.9.5 The natural gas-firing rate for each consecutive 12-month period in millions of standard cubic feet per year.

5.9.6 The daily hours of operation with natural gas.

5.9.7 The average daily throughput in tons per hour.

5.9.8 The throughput rate for each consecutive 12-month period in tons per year.

5.9.9 The dryer fuel type whenever the fuel type is changed. Fuel type in this section means natural gas only, coal only, or the combination of natural gas and coal.

5.10 Scrubber Monitoring Requirements

The permittee shall install, operate, calibrate, and maintain measuring device(s) to continuously monitor the scrubber differential pressure of the scrubbers. The scrubber differential pressure shall be recorded once per week while the dryers are in operation. In the event the measuring device becomes inoperable, it shall be repaired or replaced as soon as practicable. The records shall be maintained in accordance with Facility-wide Condition 2.16.

5.11 Scrubber Water Monitoring Requirements

The permittee shall collect a representative sample of recirculated water from the scrubber biweekly from the start through the end of the campaign. The concentration of TDS in the sample water shall be analyzed and recorded in milligrams of solids per liter of water. The records shall be maintained in accordance with Facility-wide Condition 2.16.

6. EMISSIONS UNIT – PELLET MILLS (S-D4, S-D5, S-D6, S-D7, S-D8)

6.1 Process Description

Pellet mills No. 1, 2, 3, 4, and 5 (Unit No. S-D4, S-D5, S-D6, S-D7, and S-D8, respectively) use forced ambient air to lower the temperature of the dry, pelletized pulp. The pellet mills are all manufactured by California Pellet Mill, and were installed at various dates ranging from 1958 to 1972. Pellet mills No. 1 and 5 each have rated capacities of 4.4 tons of pellets per hour. Pellet mills No. 2, 3, and 4 each have rated capacities of 8.8 tons of pellets per hour.

6.2 Control Description

Emissions from the pellet mills are controlled by five cyclones, one per each pellet mills exhaust stream (Unit No. A-D4, A-D5, A-D6, A-D7, and A-D8, respectively). By September 30, 2003, one common baghouse will be installed to reduce emissions from the pellet mills.

Emissions Limits

6.3 Emissions Limits

Upon fulfillment of the requirements of Permit Condition 13.4, total emissions of PM_{10} from the pellet mills shall not exceed any corresponding emissions rate limits listed in Table 6.1.

Table 6.1: EMISSIONS LIMITS FOR PELLET MILLS

Source Description / Unit Number	PM_{10}	
	lb/hr	T/yr
Pellet mill No. 1 / S-D4	0.8	3.1
Pellet mill No. 2 / S-D5		
Pellet mill No. 3 / S-D6		
Pellet mill No. 4 / S-D7		
Pellet mill No. 5 / S-D8		

6.4 Process Weight Limitation

The permittee shall not emit PM to the atmosphere from the pellet mills in excess of the amounts shown in the following equations, where E is the total rate of emissions from all emissions points from the source in pounds per hour and PW is the process weight in pounds per hour.

- If PW is less than 17,000 lb/hr,

  $E = 0.045(PW)^{0.60}$

- If PW is equal to or greater than 17,000 lb/hr,

  $E = 1.12(PW)^{0.27}$

Operating Requirements

6.5 Throughput Limits

The total, combined pellet throughput of the mills shall be limited to 120% of the average, total throughput rate attained for the pellet mills during the most recent performance test conducted pursuant to Permit Condition 2.6, for which DEQ approval has been granted, which demonstrated compliance with applicable pollutant emission limit(s), unless such a throughput rate would cause emissions to exceed any emission limit(s) set forth in this permit.

6.6 Baghouse Operating Requirements

By September 30, 2003, a baghouse shall be installed on the pellet mills' exhaust stream(s) prior to release to the atmosphere. The baghouse shall be operated and maintained at all times during pellet mill operation. The pressure drop across the baghouse shall be maintained within manufacturer or O&M manual specifications.

Monitoring and Recordkeeping Requirements

6.7 Pellet Mill Monitoring Requirements

The permittee shall monitor and record the information in Permit Conditions 6.7.1 and 6.7.2 for the pellet mills. The records shall be maintained in accordance with Facility-wide Condition 2.16.

6.7.1 The average daily throughput in T/hr;

6.7.2 The throughput for each consecutive 12-month period in T/yr.

6.8 Baghouse Monitoring Requirements

Within the first year of the permit term, the permittee shall install, operate, calibrate, and maintain measuring device(s) to continuously monitor the pressure drop across the baghouse. The pressure drop shall be recorded once per week while the pellet mills are in operation. In the event that any measuring device becomes inoperable, it shall be repaired or replaced as soon as practicable. The records shall be maintained in accordance with Facility-wide Condition 2.16.

7. EMISSIONS UNIT – A AND B LIME KILNS (S-K1, S-K2)

7.1 Process Description

The A and B lime kilns (Unit No. S-K1 and S-K2, respectively) are used to produce burnt lime from a mixture of coke and lime rock. The kilns have a batch feed system, but operate continuously. Both kilns were manufactured by Belgium Lime Kiln. The A lime kiln was installed in 1942 and has a rated capacity of 238 tons of lime rock per day. The B lime kiln was installed in 1968 and has a rated capacity of 277 tons of lime rock per day.

7.2 Control Description

Approximately 40% of the emissions from each kiln are controlled by a baghouse (Unit No. A-K1/2). Emissions are only directed to the baghouse during kiln-loading events. The remaining emissions (i.e., between loading events) from the A lime kiln are sent through two gas washers (Unit No. A-K1A) and the A lime kiln carbonation system (Unit No. A-K1B), in series. The remaining emissions (i.e., between loading events) from the B lime kiln are sent through the two gas washers (Unit No. A-K2A) and the B lime kiln carbonation system (Unit No. A-K2B), in series. After the carbonation systems, any excess CO emissions are vented to the atmosphere.

Emissions Limits

7.3 Emissions Limits

Emissions of PM_{10} and CO from the lime kilns shall not exceed any corresponding emissions rate limits listed in Table 7.1.

Table 7.1: EMISSIONS LIMITS FOR LIME KILNS

Source Description / Unit Number	PM_{10}		CO	
	lb/hr	T/yr	lb/hr	T/yr
A lime kiln / S-K1	0.1	0.4	685.1	3000.7
B lime kiln / S-K2	0.1	0.5	795.8	3485.6

7.4 Process Weight Limitation

The permittee shall not emit PM to the atmosphere from either of the lime kilns in excess of the amounts shown in the following equations, where E is the total rate of emissions from all emissions points from the source in pounds per hour and PW is the process weight in pounds per hour.

- If PW is less than 17,000 lb/hr,

  $E = 0.045(PW)^{0.60}$

- If PW is equal to or greater than 17,000 lb/hr,

  $E = 1.12(PW)^{0.27}$

Operating Requirements

7.5 Throughput Limits

The maximum allowable lime rock throughput of each kiln shall be limited to 120% of the average throughput rates attained during the most recent performance test conducted pursuant to Facility-wide Condition 2.11.4, for which DEQ approval has been granted, which demonstrated compliance with applicable pollutant emissions limit(s), unless such a throughput rate would cause emissions to exceed any emissions limit(s) set forth in this permit.

7.6 Baghouse Operating Requirements

The baghouse shall be operated and maintained at all times during kiln operation. The pressure drop across the baghouse shall be maintained within manufacturer or O&M manual specifications.

Monitoring and Recordkeeping Requirements

7.7 Lime Kiln Monitoring Requirements

The permittee shall monitor and record the information in Permit Conditions 7.7.1 and 7.7.2 for each lime kiln. The records shall be maintained in accordance with Facility-wide Condition 2.16.

7.7.1 The average daily lime rock throughput in tons per hour.

7.7.2 The lime rock throughput for each consecutive 12-month period in tons per year.

7.8 Baghouse Monitoring Requirements

The permittee shall install, operate, calibrate, and maintain measuring device(s) to continuously monitor the pressure drop across the baghouse. The pressure drop shall be recorded once per week when the lime kilns are in operation. In the event the measuring device becomes inoperable, it shall be repaired or replaced as soon as practicable. The records shall be maintained in accordance with Facility-wide Condition 2.16.

8. EMISSIONS UNIT – PROCESS SLAKERS (S-K4)

8.1 Process Description

The facility operates two lime slakers (A and B) to produce milk of lime from crushed calcium oxide rocks and water. The slakers were manufactured by Ogden Iron Works and are operated as batch systems. The slakers were installed in 1968. The total rated capacity of both slakers is 257 tons of calcium oxide rock per day.

8.2 Control Description

Emissions from the slakers are controlled by one spray-chamber-type scrubber (Unit No. A-K4).

Emissions Limits

8.3 Emissions Limits

Emissions of PM_{10} from the process slakers shall not exceed any corresponding emissions rate limits listed in Table 8.1.

Table 8.1: EMISSIONS LIMITS FOR PROCESS SLAKERS

Source Description / Unit Number	PM_{10}	
	lb/hr	T/yr
A and B process slakers / S-K4	1.4	6.1

8.4 Process Weight Limitation

The permittee shall not emit PM to the atmosphere from the process slakers in excess of the amounts shown in the following equations, where E is the total rate of emissions from all emissions points from the source in pounds per hour and PW is the process weight in pounds per hour.

- If PW is less than 17,000 lb/hr,

  $E = 0.045(PW)^{0.60}$

- If PW is equal to or greater than 17,000 lb/hr,

  $E = 1.12(PW)^{0.27}$

Operating Requirements

8.5 Throughput Limits

The maximum allowable calcium oxide rock throughput of each process slaker shall be limited to 120% of the average throughput rates attained during the most recent performance test conducted pursuant to Facility-wide Condition 2.12.2, for which DEQ approval has been granted, which demonstrated compliance with applicable pollutant emissions limit(s), unless such a throughput rate would cause emissions to exceed any emissions limit(s) set forth in this permit.

8.6 Scrubber Operating Requirements

The scrubber shall be operated and maintained at all times during slaker operation. The scrubber nozzle header pressure shall be maintained within manufacturer or O&M manual specifications.

Monitoring and Recordkeeping Requirements

8.7 Process Slaker Monitoring Requirements

The permittee shall monitor and record the information in Permit Conditions 8.7.1 and 8.7.2 for each process slaker. The records shall be maintained in accordance with Facility-wide Condition 2.16.

8.7.1 The average daily calcium oxide rock throughput in tons per hour.

8.7.2 The calcium oxide rock throughput for each consecutive 12-month period in tons per year.

8.8 Scrubber Monitoring Requirements

The permittee shall install, operate, calibrate, and maintain measuring device(s) to continuously monitor the scrubber nozzle header pressure. The scrubber nozzle header pressure shall be recorded once per week when the process slakers are in operation. In the event the measuring device becomes inoperable, it shall be repaired or replaced as soon as practicable. The records shall be maintained in accordance with Facility-wide Condition 2.16.

9. EMISSIONS UNIT – DRYING GRANULATOR (S-W1)

9.1 Process Description

The facility operates a drying granulator to dry wet sugar. The drying granulator was manufactured by TASCO and installed in 1987 as a replacement for an existing drying granulator. The rated capacity of the granulator is 46 tons of sugar per hour.

9.2 Control Description

Emissions from the drying granulator are controlled by a dust-box-type scrubber (Unit No. A-W1). The scrubber uses thin juice as the fluid scrubbing media.

Emissions Limits

9.3 Emissions Limits

Emissions of PM_{10} from the drying granulator shall not exceed any corresponding emissions rate limits listed in Table 9.1.

Table 9.1: EMISSIONS LIMITS FOR DRYING GRANULATOR

Source Description / Unit Number	PM_{10}	
	lb/hr	T/yr
Drying granulator / S-W1	1.1	5.0

9.4 Process Weight Limitation

The permittee shall not emit PM to the atmosphere from the drying granulator in excess of the amounts shown in the following equations, where E is the total rate of emissions from all emissions points from the source in lb/hr and PW is the process weight in lb/hr.

- If PW is less than 9,250 lb/hr,

  $E = 0.045(PW)^{0.60}$

- If PW is equal to or greater than 9,250 lb/hr,

  $E = 1.10(PW)^{0.25}$

Operating Requirements

9.5 Throughput Limits

The maximum allowable throughput of the drying granulator shall be limited to 120% of the average throughput rates attained during the most recent performance test conducted pursuant to Facility-wide Condition 2.12.3, for which DEQ approval has been granted, which demonstrated compliance with applicable pollutant emissions limit(s), unless such a throughput rate would cause emissions to exceed any emissions limit(s) set forth in this permit.

9.6 Scrubber Operating Requirements

The scrubber shall be operated and maintained at all times during granulator operation. The brix of the scrubber fluid shall be maintained within manufacturer or O&M manual specifications. Brix is defined as percent solids in thin juice.

Monitoring and Recordkeeping Requirements

9.7 Drying Granulator Monitoring Requirements

The permittee shall monitor and record the information in Permit Conditions 9.7.1 and 9.7.2 for the drying granulator. The records shall be maintained in accordance with Facility-wide Condition 2.16.

9.7.1 The average daily throughput in tons per hour.

9.7.2 The throughput for each consecutive 12-month period in tons per year.

9.8 Scrubber Monitoring Requirements

The permittee shall install, operate, calibrate, and maintain measuring device(s) to continuously monitor the brix of the scrubber fluid. The brix shall be recorded once per day while the drying granulator is in operation. In the event the measuring device becomes inoperable, it shall be repaired or replaced as soon as practicable. The records shall be maintained in accordance with Facility-wide Condition 2.16.

10. EMISSIONS UNIT – NO. 1 AND NO. 2 COOLING GRANULATORS (S-W2, S-W3)

10.1 Process Description

The facility operates the No. 1 and 2 cooling granulators (Unit No. S-W2 and S-W3, respectively) to cool hot sugar from the drying granulator. The No. 1 cooling granulator was manufactured by Hersey and was installed in 1944. The No. 2 cooling granulator was manufactured by Great Western Sugar and was installed in 1981. Per the Tier II operating permit application, the rated capacity of each granulator is 27.5 tons of sugar per hour.

10.2 Control Description

Emissions from the No. 1 and 2 cooling granulators are controlled by one of two baghouses (Unit No. A-W2 and A-W3, respectively). Both baghouses were manufactured by DEC, Inc.

Emissions Limits

10.3 Emissions Limits

Emissions of PM_{10} from the cooling granulators shall not exceed any corresponding emissions rate limits listed in Table 10.1.

Table 10.1: EMISSIONS LIMITS FOR COOLING GRANULATORS

Source Description / Unit Number	PM_{10}	
	lb/hr	T/yr
No. 1 cooling granulator / S-W2	0.3	1.3
No. 2 cooling granulator / S-W3	0.3	1.3

10.4 Process Weight Limitation for Cooling Granualtor No. 1

The permittee shall not emit PM to the atmosphere from Cooling Granulator No. 1 in amounts in excess of the amounts shown in the following equations, where E is the total rate of emissions from all emissions points from the source in pounds per hour and PW is the process weight in pounds per hour.

- If PW is less than 17,000 lb/hr,

  $E = 0.045(PW)^{0.60}$

- If PW is equal to or greater than 17,000 lb/hr,

  $E = 1.12(PW)^{0.27}$

10.5 Process Weight Limitation for Cooling Granulator No. 2

The permittee shall not emit PM to the atmosphere from Cooling Granulator No. 2 in amounts in excess of the amounts shown in the following equations, where E is the total rate of emissions from all emissions points from the source in pounds per hour and PW is the process weight in pounds per hour.

- If PW is less than 9,250 lb/hr,

  $E = 0.045(PW)^{0.60}$

- If PW is equal to or greater than 9,250 lb/hr,

  $E = 1.10(PW)^{0.25}$

Operating Requirements

10.6 Throughput Limits

The maximum allowable throughput of each cooling granulator shall be limited to 120% of the average throughput rate attained during the most recent performance test conducted pursuant to Facility-wide Condition 2.13.1, for which DEQ approval has been granted, which demonstrated compliance with applicable pollutant emissions limit(s), unless such throughput rates would cause emissions to exceed any emissions limit(s) set forth in this permit. The most recent DEQ-approved performance test conducted on the No. 1 cooling granulator shall be utilized to establish throughput limits for the No. 2 cooling granulator.

10.7 Baghouse Operating Requirements

The baghouses shall be operated and maintained at all times during granulator operation. The pressure drop across the baghouses shall be maintained within manufacturer or O&M manual specifications.

Monitoring and Recordkeeping Requirements

10.8 Cooling Granulator Monitoring Requirements

The permittee shall monitor and record the information in Permit Conditions 10.8.1 and 10.8.2 for each cooling granulator. The records shall be maintained in accordance with Facility-wide Condition 2.18.

10.8.1 The average daily throughput in tons per hour.

10.8.2 The throughput for each consecutive 12-month period in tons per year.

10.9 Baghouse Monitoring Requirements

The permittee shall install, operate, calibrate, and maintain measuring device(s) to continuously monitor the pressure drop across each of the baghouses. The pressure drops shall be recorded once per week while the cooling granulators are in operation. In the event the measuring device becomes inoperable, it shall be repaired or replaced as soon as practicable. The records shall be maintained in accordance with Facility-wide Condition 2.16.

11. EMISSIONS UNIT – PROCESS NO. 2, SPECIALTIES, AND PACKAGING-LINE SUGAR HANDLING SYSTEMS (S-W4, S-W6, S-W7)

11.1 Process Description

The emissions regulated in this section of the permit are emitted from three sugar handling systems. The unit number and installation date of each handling line are presented in Table 11.1.

Table 11.1: SOURCE DESCRIPTIONS

Source	Unit Number	Installation Date
Process No. 2 system	S-W4	1965
Specialties system	S-W6	1965
Packaging line system	S-W7	1982

The process No. 2 sugar handling system consists of elevators, scrolls, baggers, rotexes, screen stations, bagging stations, and scales. The specialties sugar handling system consists of a palletizing belt and tote machine. The packaging-line sugar handling system consists of scrolls, baggers, and a loading scale.

11.2 Control Description

Emissions from the process No. 2, specialties, and packaging-line sugar handling systems are controlled by one of three Mikro Pulsaire baghouses (Unit No. A-W4, A-W6, A-W7, respectively).

Emissions Limits

11.3 Emissions Limits

Emissions of PM_{10} from the sugar handling systems shall not exceed any corresponding emissions rate limits listed in Table 11.2.

Table 11.2: EMISSIONS LIMITS FOR SUGAR HANDLING SYSTEMS

Source Description / Unit Number	PM_{10}	
	lb/hr	T/yr
Process No. 2 system / S-W4	0.3	1.2
Specialties system / S-W6	0.1	0.6
Packaging-line system / S-W7	0.2	0.9

11.4 Process Weight Limitation for No. 2 Process and Specialties Lines

The permittee shall not emit PM to the atmosphere from the No. 2 process or specialties lines in excess of the amounts shown in the following equations, where E is the total rate of emissions from all emissions points from the source in pounds per hour and PW is the process weight in pounds per hour.

- If PW is less than 17,000 lb/hr,

$$E = 0.045(PW)^{0.60}$$

- If PW is equal to or greater than 17,000 lb/hr,

$$E = 1.12(PW)^{0.27}$$

11.5 Process Weight Limitation for Packaging Line

The permittee shall not emit PM to the atmosphere from the packaging line in excess of the amounts shown in the following equations, where E is the total rate of emissions from all emissions points from the source in pounds per hour and PW is the process weight in pounds per hour.

- If PW is less than 9,250 lb/hr,

$$E = 0.045(PW)^{0.60}$$

- If PW is equal to or greater than 9,250 lb/hr,

$$E = 1.10(PW)^{0.25}$$

Operating Requirements

11.6 Throughput Limits

The maximum allowable throughput of each sugar handling system shall be limited to 120% of the average throughput rates attained during the most recent performance test conducted pursuant to Facility-wide Condition 2.13.2, for which DEQ approval has been granted, which demonstrated compliance with applicable pollutant emissions limit(s), unless such throughput rates would cause emissions to exceed any emissions limit(s) set forth in this permit.

11.7 Baghouse Operating Requirements

The baghouses shall be operated and maintained at all times during the operation of the No. 2 process line, specialties line, or packaging line. The pressure drop across each baghouse shall be maintained within manufacturer or O&M manual specifications.

Monitoring and Recordkeeping Requirements

11.8 Sugar Handling System Monitoring Requirements

The permittee shall monitor and record the information in Permit Conditions 11.8.1 and 11.8.2 for each sugar handling system. The records shall be maintained in accordance with Facility-wide Condition 2.16.

11.8.1 The average daily throughput in tons per hour.

11.8.2 The throughput for each consecutive 12-month period in tons per year.

11.9 Baghouse Monitoring Requirements

The permittee shall install, operate, calibrate, and maintain measuring device(s) to continuously monitor the pressure drop across each of the baghouses. The pressure drops shall be recorded once per week while the sugar handling systems are in operation. In the event the measuring device becomes inoperable, it shall be repaired or replaced as soon as practicable. The records shall be maintained in accordance with Facility-wide Condition 2.16.

12. EMISSIONS UNIT – LIME KILN BUILDING (S-K3)

12.1 Process Description

Emissions from the vents of the lime kiln building (Unit No. S-K3) are created by one crusher and all coke, lime-rock, and calcium oxide-handling processes within the building. Emissions from the lime kiln building are based on the input of lime rock to the kilns (refer to Appendix 2 of the Tier II application). Per the Tier I operating permit application, the maximum throughput is 814 tons of lime rock per day.

12.2 Control Description

Emissions from the lime kiln building are controlled by one Mikro Pulsaire baghouse (Unit No. A-K3).

Emissions Limits

12.3 Emissions Limits

Emissions of PM_{10} from the lime kiln building shall not exceed any corresponding emissions rate limits listed in Table 12.1.

Table 12.1: EMISSIONS LIMITS FOR LIME KILN BUILDING

Source Description / Unit Number	PM_{10}	
	lb/hr	T/yr
Lime kiln building / S-K3	0.8	3.5

12.4 Process Weight Limitation

The permittee shall not emit PM to the atmosphere from the lime kiln building bin excess of the amounts shown in the following equations, where E is the total rate of emissions from all emissions points from the source in pounds per hour and PW is the process weight in pounds per hour.

- If PW is less than 17,000 lb/hr,

  $$E = 0.045(PW)^{0.60}$$

- If PW is equal to or greater than 17,000 lb/hr,

  $$E = 1.12(PW)^{0.27}$$

Operating Requirements

12.5 Throughput Limits

The maximum allowable throughput of lime rock to the kilns shall be limited to 120% of the average throughput rates attained during the most recent performance test conducted pursuant to Facility-wide Condition 2.13.3, for which DEQ approval has been granted, which demonstrated compliance with

applicable pollutant emissions limit(s), unless such throughput rates would cause emissions to exceed any emissions limit(s) set forth in this permit.

12.6 Baghouse Operating Requirements

The lime kiln building baghouse shall be operated and maintained at all times during operation of the crusher or any coke, lime rock-, and calcium oxide-handling processes within the lime kiln building. The pressure drop across the lime kiln building baghouse shall be maintained within manufacturer or O&M manual specifications.

Monitoring and Recordkeeping Requirements

12.7 Lime Kiln Building Throughput Monitoring Requirements

The permittee shall monitor and record the information in Permit Conditions 12.7.1 and 12.7.2 for the lime kiln building. The records shall be maintained in accordance with Facility-wide Condition 2.16.

12.7.1 The average daily throughput of lime rock to the kilns in tons per hour.

12.7.2 The throughput of lime rock to the kilns for each consecutive 12-month period in tons per year.

12.8 Baghouse Monitoring Requirements

The permittee shall install, operate, calibrate, and maintain measuring device(s) to continuously monitor the pressure drop across the lime kiln building baghouse. The pressure drop shall be recorded once per week while the crusher and/or any coke, lime rock-, or calcium oxide-handling processes are in operation. In the event the measuring device becomes inoperable, it shall be repaired or replaced as soon as practicable. The records shall be maintained in accordance with Facility-wide Condition 2.16.

13. COMPLIANCE SCHEDULE

13.1 To ensure compliance with applicable requirements in the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.001 et. seq, the permittee shall implement the compliance schedule presented in Table 13.1. Permit Conditions 13.3-13.9 are necessary to ensure that emissions from the facility do not cause or significantly contribute to a violation of the NAAQS. Any changes in the equipment, control technology, or timeframes specified in this compliance schedule must be approved by DEQ.

Table 13.1: COMPLIANCE SCHEDULE

Permit Conditions	Milestone	Deadline	Documentation/Reporting
13.3	Fugitive Dust Management Plan implementation	By November 29, 2002	Permit Conditions 2.2, 2.3, 2.4
			DEQ notification
13.4	Installation and operation of pellet mill cyclone baghouse	By September 30, 2003	Permit Conditions 6.7 and 6.9
			Facility-wide Conditions 2.11.1-2.11.3
	Flue gases from Riley boiler merged into the B&W stack		DEQ notification
13.5	Install beet cleaning system	By September 30, 2004	Submit PTC application for steam dryer
			DEQ notification
13.6	Install transformer evaporator and mill heaters	By September 30, 2005	DEQ notification
13.7	Order and fabricate steam dryer	By September 30, 2006	DEQ notification
13.8	Installation and operation of steam dryer system	By September 30, 2007	DEQ notification
			Facility-wide Condition 2.14
	Performance test requirements for South dryer		Tier II operating permit application
	Closure of the Center and North dryers		

13.2 Upon issuance of the Tier II operating permit, emissions of PM_{10} and CO from the South, Center, and North dryers and the No. 1, 2, 3, 4, and 5 pellet mills shall not exceed any corresponding emissions rate limits listed in the following table:

Table 13.2: EMISSIONS LIMITS FOR DRYERS AND PELLET MILLS

Source Description / Unit Number	PM_{10}		CO	
	lb/hr	T/yr	lb/hr	T/yr
South pulp dryer / S-D1	37.4	164.0	146.0	640.0
Center pulp dryer / S-D2	37.4	164.0	95.5	418.2
North pulp dryer / S-D3	28.4	124.4	63.9	279.9
Pellet mill No. 1 / S-D4	1.8	7.8		
Pellet mill No. 2 / S-D5	2.7	11.8		
Pellet mill No. 3 / S-D6	2.7	11.8		
Pellet mill No. 4 / S-D7	2.7	11.8		
Pellet mill No. 5 / S-D8	1.8	7.8		

13.2.1 Upon completion of Permit Condition 13.4.1, emissions of PM_{10} from the pellet mills shall comply with Permit Condition 6.3. Upon completion of Permit Conditions 13.8.1 and 13.8.2, emissions of PM_{10} and CO from the South dryer shall comply with Permit Condition 5.3.

13.3 By November 29, 2002, TASCO shall comply with the following permit conditions:

13.3.1 The provisions of Facility-wide Conditions 2.1-2.4 shall be fully implemented, including all required monitoring and recording.

13.3.2 When the requirements of Permit Condition 13.3.1 have been fulfilled, the permittee shall notify DEQ in writing. The permittee shall notify DEQ in writing of any delay or failure to meet the requirements of Permit Condition 13.3 as expediently as reasonably possible.

This requirement was fulfilled per TASCO's October 21, 2005 submittal.

13.4 By September 30, 2003, TASCO shall comply with the following permit conditions:

13.4.1 The provisions of Permit Conditions 6.6 and 6.8 shall be fully implemented.

13.4.2 All flue gases from the Riley boiler shall be exhausted to the atmosphere through the B&W boiler stack (Unit No. P-B1/2) after passing through the existing baghouse (Unit No. A-B3).

13.4.3 When the requirements of Permit Conditions 13.4.1 and 13.4.2 have been fulfilled, the permittee shall notify DEQ in writing. The notification provided with respect to Permit Condition 13.4.1 shall include all relevant technical specifications and data from the baghouse manufacturer. The notification provided with respect to Permit Condition 13.4.2 shall include a schematic diagram of the final exhaust system routing for the B&W No. 1, B&W No. 2, and Riley boilers. The permittee shall notify DEQ in writing of any delay or failure to meet the requirements of Permit Condition 13.4 as expediently as reasonably possible.

This requirement was fulfilled per TASCO's October 21, 2005 submittal.

13.5 By September 30, 2004, TASCO shall comply with the following permit conditions:

13.5.1 In accordance with IDAPA 58.01.01.201, the permittee shall submit a PTC application for the proposed steam dryer system (intended to replace the Center and North dryers). The application shall include technical parameters, including, but not limited to, operational requirements and rated capacity of the steam dryer system, schematic diagrams of the steam dryer system, and all information needed to calculate and/or verify emissions rates associated with the steam dryer system and all affected units.

13.5.2 Upon DEQ issuance of a PTC or exemption determination for the PTC application required by Permit Condition 13.5.1, the permittee shall install the beet cleaning system required for operation of the steam dryer system.

13.5.3 When the requirements of Permit Condition 13.5.2 have been fulfilled, the permittee shall notify DEQ in writing. The permittee shall notify DEQ in writing of any delay or failure to meet the requirements of Permit Condition 13.5 as expediently as reasonably possible.

13.6 By September 30, 2005, TASCO shall comply with the following permit conditions:

13.6.1 Upon DEQ issuance of a PTC or exemption determination for the PTC application required by Permit Condition 13.5.1, the permittee shall install the transformer evaporator and mill heaters required for operation of the steam dryer system.

13.6.2 When the requirements of Permit Condition 13.6.1 have been fulfilled, the permittee shall notify DEQ in writing. The permittee shall notify DEQ in writing of any delay or failure to meet the requirements of Permit Condition 13.6 as expediently as reasonably possible.

This requirement was fulfilled per TASCO's October 21, 2005 submittal.

13.7 By September 30, 2006, TASCO shall comply with the following permit conditions:

13.7.1 Upon DEQ issuance of a PTC or exemption determination for the PTC application required by Permit Condition 13.5.1, the permittee shall order and fabricate the steam dryer system.

13.7.2 When the requirements of Permit Condition 13.7.1 have been fulfilled, the permittee shall notify DEQ in writing. The permittee shall notify DEQ in writing of any delay or failure to meet the requirements of Permit Condition 13.7 as expediently as reasonably possible.

This facility has initiated construction of the pulp steam dryer one year ahead of the scheduled construction start date per TASCO's October 21, 2005 submittal.

13.8 By September 30, 2007, TASCO shall comply with the following permit conditions:

13.8.1 Upon DEQ issuance of a PTC or exemption determination for the PTC application required by Permit Condition 13.5.1, the permittee shall install and operate the steam dryer system.

13.8.2 The Center and North dryers shall permanently cease operation at the TASCO facility located in Nampa, Idaho.

13.8.3 When the requirements of Permit Conditions 13.8.1 and 13.8.2 have been fulfilled, the permittee shall notify DEQ in writing. The permittee shall notify DEQ in writing of any delay or failure to meet the requirements of Permit Conditions 13.8 as expediently as reasonably possible.

This facility has initiated construction of the pulp steam dryer one year ahead of the scheduled construction start date per TASCO's October 21, 2005 submittal.

13.9 The permittee shall submit a Facility-wide Tier II operating permit application within 60 days of fulfilling the requirements of Permit Condition 13.8. The permit application shall include, at a minimum, updated process descriptions, including all changes implements in accordance with Permit Conditions 13.3-13.8; updated information obtained by the performance testing requirements of this Tier II operating permit; and an updated facility-wide modeling analysis for all criteria pollutants. Thirty

days prior to submission of the modeling analysis for Tier II operating permit application, the permittee shall submit a modeling protocol to DEQ for approval.

13.10 In the event that this Tier II operating permit should expire before DEQ issues a renewed Tier II operating permit or before the requirements of Permit Conditions 13.3-13.9 are met by the permittee, TASCO shall continue to comply with all the requirements contained in this Tier II operating permit until such time as DEQ issues an updated Tier II operating permit for the facility.

13.11 Until such time that all of the compliance schedule permit conditions are completed, TASCO shall submit a progress report each calendar quarter to DEQ stating when each of the milestones and compliance with each condition in the compliance schedule were or will be achieved, and an explanation of why any dates were not or will not be met and a detailed description of any preventative or corrective measures undertaken by the permittee.

13.12 Issuance of the Tier II operating permit with this schedule of compliance shall not relieve any owner or operator of the responsibility to comply with all applicable local, state, and federal rules and regulations.

14. SUMMARY OF EMISSIONS RATE LIMITS

Table 14.1 includes the emissions limits for which the facility must demonstrate compliance.

Table 14.1: SUMMARY OF ALLOWABLE EMISSIONS RATE LIMITS IN THE TIER II OPERATING PERMIT.

TASCO, Nampa Emissions Limits[a] - Hourly (lb/hr), and Annual[b] (T/yr)										
Source Description / Unit Number	**PM_{10}[c]**		**NO_x**		**CO**		**VOC**		**SO_2**	
	lb/hr	**T/yr**	**Lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**
B&W No. 1 boiler / S-B1	138.1	604.3			36.4	159.0				
B&W No. 2 boiler / S-B2										
Riley boiler / S-B3										
Union boiler / S-B4	1.6	6.8			6.0	26.3				
South pulp dryer / S-D1	18.7	82.0			126.8	555.2				
Center pulp dryer / S-D2	0.0	0.0			0.0	0.0				
North pulp dryer / S-D3	0.0	0.0			0.0	0.0				
Pellet mill No. 1 / S-D4	0.8	3.1								
Pellet mill No. 2 / S-D5										
Pellet mill No. 3 / S-D6										
Pellet mill No. 4 / S-D7										
Pellet mill No. 5 / S-D8										
A lime kiln / S-K1	0.1	0.4			685.1	3000.7				
B lime kiln / S-K2	0.1	0.5			795.8	3485.6				
A and B process slakers / S-K4	1.4	6.1								
Drying Granulator / S-W1	1.1	5.0								
No. 1 cooling granulator / S-W2	0.3	1.3								
No. 2 cooling granulator / S-W3	0.3	1.3								
Process No. 2 handling system / S-W4	0.3	1.2								
Specialties handling system / S-W6	0.1	0.6								
Packaging-line handling system / S-W7	0.2	0.9								
Lime kiln building / S-K3	0.8	3.5								

[a] as determined by a pollutant-specific EPA reference method, a DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in this permit analysis.

[b] as determined by multiplying the actual or allowable (if actual is not available) pound per hour emissions rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

[c] includes condensibles.

15. OTHER SOURCES

Table 16.1 below identifies other air pollution-emitting sources (included in the Tier II application and Northern Ada County PM_{10} SIP Plan Emissions Inventory) at the facility that do not require specific permit conditions to demonstrate compliance with applicable air quality standards.

Table 16.1: OTHER AIR POLLUTION SOURCES AT THE FACILITY

Source Description
Main mill / S-O1
A-side sulfur stove / S-O2
B-side sulfur stove / S-O3
Fugitives (coal unloading, pulp and pellet loadout/storage, coal storage, beet hauling, vehicle traffic on unpaved roads, lime rock handling, coke handling) / F-D9 and F-O4, F-D10, F-O5O6a, F-O5O6b, F-O5O6c, F-O7, F-O8, F-O9, F-O10

16. TIER II PERMIT GENERAL PROVISIONS

1. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules*, and the Environmental Protection and Health Act, Idaho Code 39-101 et seq.

2. The permittee shall at all times (except as provided in the *Rules*) maintain and operate in good working order all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.

3. The permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials:

   - To enter upon the permittee's premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit; and

   - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and to require stack emissions testing (i.e., performance tests) in conformance with state-approved or accepted EPA procedures when deemed appropriate by the Director.

4. Except for data determined to be confidential under Section 9-342A *Idaho Code*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate regional office of DEQ.

5. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.

6. In the event of any change in control or ownership of source(s) from which the authorized emissions emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter; a copy of which shall be forwarded to the Director.

7. This permit shall be renewable on the expiration date, provided the permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within 60 days after receipt of the Director's request shall cause the permit to become void.

8. The Director may require the permittee to develop a list of operation and maintenance procedures to be approved by DEQ. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.

9. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.